

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A heating element for heating a portion of a semiconductor fabrication furnace, comprising:

a base ring having a one coil recess;

a coil situated within the one coil recess; and

an insulating block affixed to the base ring, the insulating block being permanently attached to the base ring; and

an insulating spacer removably placed between the insulating block and a second adjacent insulating block, wherein

the heating element surrounds substantially less than the entirety of the furnace.

2. (original) The heating element of claim 1, wherein the heating coil is removably situated within the coil recess.

3. (original) The heating element of claim 1, wherein the insulating block is located directly behind the heating coil.

4. (original) The heating element of claim 1, wherein the base ring and insulating block are both made from the same insulating material.

5. (original) The heating element of claim 4, wherein the insulating material is a vacuum-formed silica fiber and aluminum composite.

6. (cancelled).

7. (currently amended) The heating element of claim ~~6~~ 1, wherein the heating element is configured for low-temperature operation.

8. (currently amended) The heating element of claim ~~6~~ 1, wherein the heating element is configured for medium-temperature operation.

9. (currently amended) The heating element of claim ~~6~~ 1, wherein the heating element is configured for high-temperature operation.

10. (cancelled).

11. (previously presented) The heating element of claim 1, wherein the insulating spacer is temporarily placed during operation of the heater element.

12. (currently amended) The heating element of claim ~~6~~ 1, further comprising an auxiliary insulating cylinder, comprising:

an exterior cylindrical shell sized to fit about the combination of the base ring and at least one insulating block; and

an interior insulator sized to fit between the block and an adjacent insulating block.

13. (original) The heating element of claim 12, wherein:

the inner surface of the exterior cylindrical shell contacts the outer surface of the insulating block and outer surface of the adjacent insulating block; and

the inner surface of the interior insulator contacts the outer surface of the base ring.

14. (previously presented) A method for heating and insulating a semiconductor fabrication furnace, comprising:

determining a desired operating temperature;

in response to determining a desired operating temperature, selecting a corresponding heater element configuration;

placing a first and second heater element having the proper configuration about the furnace, the first heater element corresponding to a first and second temperature zone;

detecting a temperature fluctuation in the first temperature zone;

increasing power to at least one coil in the first and second heater elements in order to increase the operating temperature of the furnace; and

in response to increasing power to the at least one coil, adding an insulation spacer to the first and second heater elements.

15. (cancelled).

16. (previously presented) The method of claim 14 further comprising:
detecting that a heater coil in the first heater element is no longer functioning; and
in response to detecting the non-functioning heater coil, replacing the first heater
element while leaving the second heater element in place.

17. (cancelled).

18. (previously presented) The method of claim 14 further comprising:
increasing power to the at least one coil in order to increase the operating
temperature of the furnace; and
in response to increasing power to the at least one coil, placing an auxiliary
insulating cylinder about the first and second heater elements.

19. (cancelled).

20. (cancelled).

Amendments to the Drawings:

Figure 11 is amended.

Applicant has amended Figure 11 as shown in red attached, to more clearly show the feature of the “insulating spacer 1100” removably placed between the insulating block 210 and a second adjacent insulating block 210. Specifically, reference numerals 210 are added all to the insulating blocks shown in the figure which surround the insulating spacer 1100. Applicant has further amended FIG. 11 to change the downward arrow to a multi-directional arrow, that is having arrows at both ends as shown in the markup to FIG. 11, to better illustrate its removable nature.